

Date: Friday, 26/01/2007 1:59:00 PM
User: Linda Lacelle

Process Sheet

| | | | |
|-----------------------|--|------------------|--|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : 206/OH-58 SADDLE, INBOARD, RIGHT SIDE - UNDER REVIEW |
| Job Number | : 30480 | Part Number | : D29381 |
| Estimate Number | : 10940 | Drawing Number | : D2938 UNDER REVIEW |
| P.O. Number | : <i>NIA</i> | Project Number | : N/A |
| This Issue | : 26/01/2007 S.O. No. : <i>NIA</i> | Drawing Revision | : B |
| Prsht Rev. | : NC | Material | : <i>NIA</i> |
| First Issue | : <i>NIA</i> Type : MACHINED PARTS | Due Date | : 12/02/2007 |
| Previous Run | : 30281 | Qty: | 6 Um: Each |
| Written By | : | | |
| Checked & Approved By | : | | |
| Comment | : Est: B -00.06.26 New DWG rev (mpp 2069) EC | | |

Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

| | | |
|-----|----------|-------------------------|
| 1.0 | D6101003 | 7075-T7351 2X6.25X7.875 |
|-----|----------|-------------------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)
Issue material from stock: 7075-T7351 (QQ-A-250/12)
Cut Size 2.0" x 6.25" X 7.88" Grain Along 7.88" Length
(D6101-003) Batch No: *1325349*

BC 07.02.06 6

| | | |
|-----|-------|--------------------------------|
| 2.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



Comment: HAAS CNC VERTICAL MACHINING #1
Program part number and batch number ✓
1-Inspect part number and batch number are programmed correctly ✓
2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet ✓
3-Machine Step No 2 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet ✓
4-Machine Step No 3 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet ✓
5-Deburr ✓

SA 07.02.02 / M8 07/02/03 6

| | | |
|-----|---------------|------------------------------|
| 3.0 | MILLING CONV. | CONVENTIONAL MILLING MACHINE |
|-----|---------------|------------------------------|



Comment: CONVENTIONAL MILLING MACHINE
Machine Keyway and inspect per attached dimension sheet



M8 07/02/03 6


| | | |
|-----|-----|------------------------------|
| 4.0 | QC1 | INSPECT ALL DIM TO DIM SHEET |
|-----|-----|------------------------------|



Comment: INSPECT ALL DIM TO DIM SHEET

SA 07.02.02 / M8 07/02/03 6

| W/O: | | WORK ORDER CHANGES | | | | | | |
|----------|------|--|----|------|-----|--|---|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| 07.01.26 | 2 | TOOL PAD FOR FLANGE POCKETS SHOULD BE RAISED Dwg change to be made. | | | |  07.01.26 P. 051/42 |  07.02.05 | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 07/02/13
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Friday, 26/01/2007 1:59:01 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE - UNDER
REVIEW

Job Number: 30480

Part Number: D29381

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

BF 07-02-06

6

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

SS/Y

07-02-06

6

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M103141

ATTN: PAINT 1pc grey

M-H/Y

07-02-06

6X

07/02/12

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

P 7/1-2/13

6

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

STY 28

P 7/1-2/13

6

SW 11/01

16/02

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/02/13

Job Completion



U 07.02.13

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

| | | |
|---|---------------------|-------------|
| DART AEROSPACE LTD | Work Order: | 30480 |
| Description: 206 Saddle, Outboard, Left side | Part Number: | D2938-1 |
| Inspection Dwg: D2938 Rev. B | | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. B and record below:

| | | | | Recorded Actual Dimensions | | | | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | 1 | 2 | 3 | 4 | | |
| A | 0.100 | 0.140 | | .125 | .125 | .125 | .125 | | |
| B | 0.100 | 0.140 | | .125 | .125 | .125 | .125 | | |
| C | 0.100 | 0.140 | | .119 | .120 | .120 | .120 | | |
| D | 0.210 | 0.230 | | .220 | .221 | .220 | .220 | | |
| E | 1.245 | 1.255 | | 1.250 | 1.250 | 1.250 | 1.250 | | |
| F | 1.245 | 1.255 | | 1.250 | 1.250 | 1.250 | 1.250 | | |
| G | 2.495 | 2.505 | | 2.500 | 2.500 | 2.500 | 2.500 | | |
| H | 0.510 | 0.515 | | .511 | .511 | .511 | .511 | | |
| I | 1.572 | 1.582 | | 1.577 | 1.577 | 1.572 | 1.577 | | |
| J | 2.495 | 2.505 | | 2.498 | 2.498 | 2.498 | 2.498 | | |
| K | 0.257 | 0.262 | DT8683 | .258 | .258 | .258 | .258 | | |
| L | 0.312 | 0.317 | DT8686 | .314 | .314 | .314 | .314 | | |
| M | 0.235 | 0.240 | | .238 | .238 | .238 | .238 | | |
| N | 0.100 | 0.140 | | .121 | .121 | .120 | .120 | | |
| O | 0.540 | 0.560 | | .548 | .550 | .550 | .550 | | |
| P | 0.490 | 0.510 | | .494 | .499 | .498 | .498 | | |
| Q | 3.715 | 3.725 | | 3.720 | 3.720 | 3.720 | 3.720 | | |
| R | 2.720 | 2.760 | | 2.740 | 2.740 | 2.740 | 2.740 | | |
| S | 0.240 | 0.270 | | .251 | .252 | .250 | .250 | | |
| T | 0.100 | 0.180 | | .140 | .140 | .140 | .140 | | |
| U | 1.625 | 1.635 | | 1.630 | 1.630 | 1.630 | 1.630 | | |
| V | 1.362 | 1.372 | | 1.367 | 1.367 | 1.367 | 1.367 | | |
| W | 0.316 | 0.321 | DT8690 | .320 | .320 | .320 | .320 | | |
| X | 1.250 | 1.270 | | 1.258 | 1.257 | 1.260 | 1.260 | | |
| Y | 1.565 | 1.585 | | 1.573 | 1.574 | 1.575 | 1.575 | | |
| Z | | | | | | | | | |
| AA | | | | | | | | | |
| AB | | | | | | | | | |
| AC | | | | | | | | | |
| AD | | | | | | | | | |
| AE | | | | | | | | | |
| AF | | | | | | | | | |
| AG | | | | | | | | | |
| AH | | | | | | | | | |
| Accept/Reject | | | | | | | | | |

| | |
|--------------|---------------|
| Measured by: | SD |
| Date: | 07.02.02 / MS |

| | |
|-------------|--|
| Audited by: | |
| Date: | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|--|------------|----------|
| A | | New Issue | RF | |
| B | 02.12.12 | Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690 | KJ/RF | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

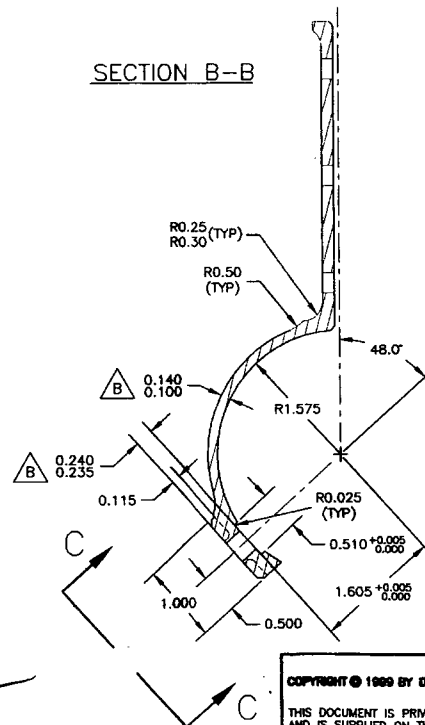
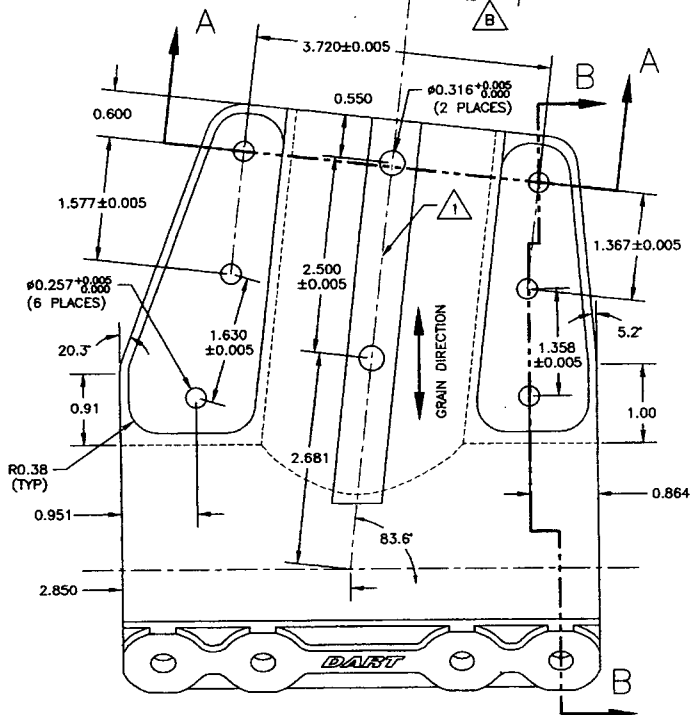
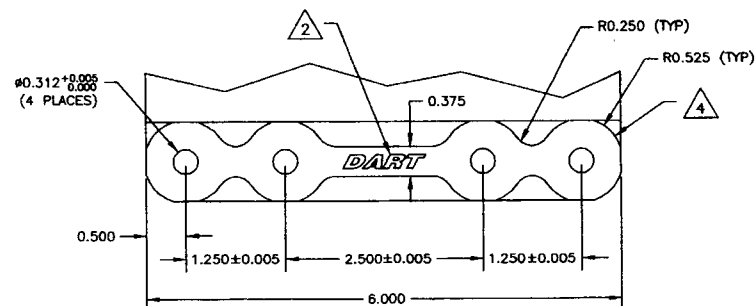
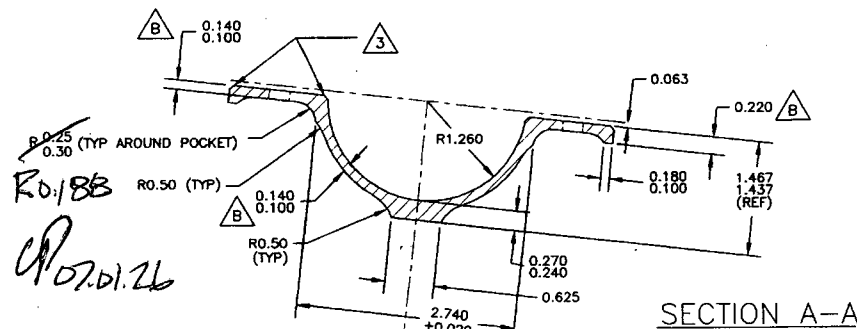
| | |
|---|-----------------------------|
| DART AEROSPACE LTD | Work Order: 30480 |
| Description: 206 Saddle, Outboard, Left side | Part Number: D2938-1 |
| Inspection Dwg: D2938 Rev. B | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. B and record below:

| | | | | Recorded Actual Dimensions | | | | By | Date |
|---------------|-------|-------|----------------|----------------------------|--------|---|---|----|------|
| Dim | Min | Max | Go/No Go Gauge | 5 T | 6 2 | 3 | 4 | | |
| A | 0.100 | 0.140 | | .125 | .125 | | | | |
| B | 0.100 | 0.140 | | .125 | .125 | | | | |
| C | 0.100 | 0.140 | | .122 | .120 | | | | |
| D | 0.210 | 0.230 | | .220 | .220 | | | | |
| E | 1.245 | 1.255 | | 1.250 | 1.250 | | | | |
| F | 1.245 | 1.255 | | 1.250 | 1.250 | | | | |
| G | 2.495 | 2.505 | | 2.500 | 2.500 | | | | |
| H | 0.510 | 0.515 | | .512 | .512 | | | | |
| I | 1.572 | 1.582 | | 1.578 | 1.578 | | | | |
| J | 2.495 | 2.505 | | 2.500 | 2.500 | | | | |
| K | 0.257 | 0.262 | DT8683 | .258 | .258 | | | | |
| L | 0.312 | 0.317 | DT8686 | .313 | .313 | | | | |
| M | 0.235 | 0.240 | | .238 | .239 | | | | |
| N | 0.100 | 0.140 | | .130 | .128 | | | | |
| O | 0.540 | 0.560 | | .550 | .550 | | | | |
| P | 0.490 | 0.510 | | .505 | .500 | | | | |
| Q | 3.715 | 3.725 | | 3.720 | 3.720 | | | | |
| R | 2.720 | 2.760 | | 2.751 | 2.750 | | | | |
| S | 0.240 | 0.270 | | .250 | .250 | | | | |
| T | 0.100 | 0.180 | | .140 | .140 | | | | |
| U | 1.625 | 1.635 | | 1.630 | 1.630 | | | | |
| V | 1.362 | 1.372 | | 1.370 | 1.370 | | | | |
| W | 0.316 | 0.321 | DT8690 | .318 | .318 | | | | |
| X | 1.250 | 1.270 | | 1.265 | 1.265 | | | | |
| Y | 1.565 | 1.585 | | 1.571 | 1.571 | | | | |
| Z | | | | | | | | | |
| AA | | | | | | | | | |
| AB | | | | | | | | | |
| AC | | | | | | | | | |
| AD | | | | | | | | | |
| AE | | | | | | | | | |
| AF | | | | | | | | | |
| AG | | | | | | | | | |
| AH | | | | | | | | | |
| Accept/Reject | | | | | | | | | |

| | |
|-----------------|-------------|
| Measured by: MS | Audited by: |
| Date: 07/02/03 | Date: |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|--|------------|----------|
| A | | New Issue | RF | |
| B | 02.12.12 | Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690 | KJ/RF | |



D2938-1 LH SADDLE (SHOWN)
D2938-2 RH SADDLE (OPPOSITE)

MATERIAL: 7075-T7351 (QQ-A-250/12)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.005 WITH MIN RAD 0.250
- 3 CHAMFER 0.050" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.050" x 45°

RELEASED



UNDER REVIEW

00.05.29 CB
Change R0.30

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| | | |
|----------|----------|--|
| B | 00.05.29 | CHANGED GEOMETRY AND MATERIAL |
| A | 99.11.12 | NEW ISSUE |
| DESIGN | DRAWN BY | DART DART AEROSPACE USA, INC. BELLEVUE, WA |
| CHECKED | APPROVED | DRAWING NO. D2938 |
| DATE | TITLE | SADDLE OUTSIDE |
| 00.05.29 | | SCALE 2:3 |

REV. B
SHEET 1 OF 1

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|--------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr. | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: October 19, 2006 3:31 PM
To: 'S Shahbazian'
Cc: 'Provencal, Chris'; 'Charbonneau, Eric'
Subject: RE: Radius dimension on the saddle
Importance: High

Change the drawings. I guess we will also change the 0.313 crosstube hole dimensions as well.
See D2661 to D2668 as well as D2932 to D2933.

David

From: S Shahbazian [mailto:sshahbazian@dartaero.com]
Sent: Thursday, October 19, 2006 1:16 PM
To: Shepherd, David
Cc: Provencal, Chris; Charbonneau, Eric
Subject: Radius dimension on the saddle

Dave,
On attach saddle drawing, according to Eric the marked-up radius that reads 0.30 and 0.25, should be 0.188 since the tooling has been changed long time ago, and apparently they have been machining those radiuses to 0.188 for a while. Do you see a problem with that? if not I will go ahead and change the drawing to reflect the changes.

Serge

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

26/01/2007